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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/536,509

06/24/2005

Claude Mathieu

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6908

69095

7590

01/27/2009

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EXAMINER

PHILOGENE, PEDRO

ART UNIT

PAPER NUMBER

3733

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/536,509	<b>Applicant(s)</b> MATHIEU ET AL.	
	<b>Examiner</b> Pedro Philogene	<b>Art Unit</b> 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,7-9,11,16,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,7-9, 11,16,24,25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### ***Allowable Subject Matter***

The indicated allowability of claims 24, 25, is withdrawn in view of the newly discovered reference(s) to Mast. Rejections based on the newly cited reference(s) follow.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 16, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahners (6,955,677) in view of Mast (5,269,784).

With respect to claims 24, 25, Dahners discloses a bone fixation comprising a body (60) having an upper surface and a bottom surface wherein the body is formed of a plastic material; as set forth in column 6, lines 26-29; one or more sleeve shaped openings extending from the upper surface through the bottom surface each of which openings is configured to receive a bone fixation device (10); as set forth in column 6, lines 44-62; a first peripheral perimeter formed of titanium material.

It is noted that Dahners did not teach of a second peripheral perimeter formed of a titanium material wherein the first and second peripheral perimeters are joined rigidly inserted within the sleeve shaped openings and wherein the sleeve shaped extension is located above the upper surface of the body and acts as a target aid for the bone fastener; as claimed by applicant. However, in similar art, Mast provides the evidences of the use of a first perimeter and second perimeters formed of memory alloy containing a sleeve shaped extension, as best seen in Fig.9, for the rigid fixation of a bone screw to a bone plate having plate holes.

Art Unit: 3733

Therefore, given the teaching of Mast, it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the device of Dahners, as taught by Mast, to provide a rigid fixation of a bone screw to a bone plate having plate holes.

As to the sleeve shaped extension located above the upper surface of the body, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the extension of Mast on the upper surface, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

As to the shape of the perimeter being polygonal, this configuration of the perimeter is nothing more than one of numerous configurations one of ordinary skill in the art would have found obvious for the purpose of providing mating surfaces in the perimeter of Dahners. In re Dailey, 149 USPQ 47 (CCPA 1976).

Claims 7-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Dahners (6,955,677) in view of Mast (5,269,784) in view of Frigg et al. (6,206,881).

Although Dahners teaches of plastic material, it is noted that Dahners did not teach of the plastic being PEEK and reinforcing material consisting of Carbon fibers and Peek fibers; as claimed by applicant. However, in similar art, Frigg et al provides the evidences of the use of a plate made of plastic that is PEEK and reinforced with carbon fibers and Peek fibers so that excellent geometric locking is achieved.

Art Unit: 3733

Therefore, given the teaching of Frigg et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Dahners, as taught by Frigg et al, so that excellent geometric locking is achieved.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahners (6,955,677) in view of Mast (5,269,784) in view of Eitenmuller et al. (5,108,399).

It is noted that the above combination of reference did not teach of elements that are covered by a coating wherein the coating being selected from the group consisting of titanium and hydroxylapatite; as claimed by applicant. However, in similar art, Eitenmuller et al provide the evidence of a plate element coated with titanium and hydroxylapatite to ensure rapid incorporation on the bone surface.

Therefore, given the teaching of Eitenmuller et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Dahners, as taught by Eitenmuller et al, to ensure rapid incorporation of the bone surface.

### ***Response to Amendment***

Applicant's arguments with respect to claims 3, 7-9, 11, 16, 24, 25, have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

A shortened statutory period for reply to this action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (571) 272-

Art Unit: 3733

4716. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272 - 4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pedro Philogene/  
Primary Examiner, Art Unit 3733  
January 22, 2009